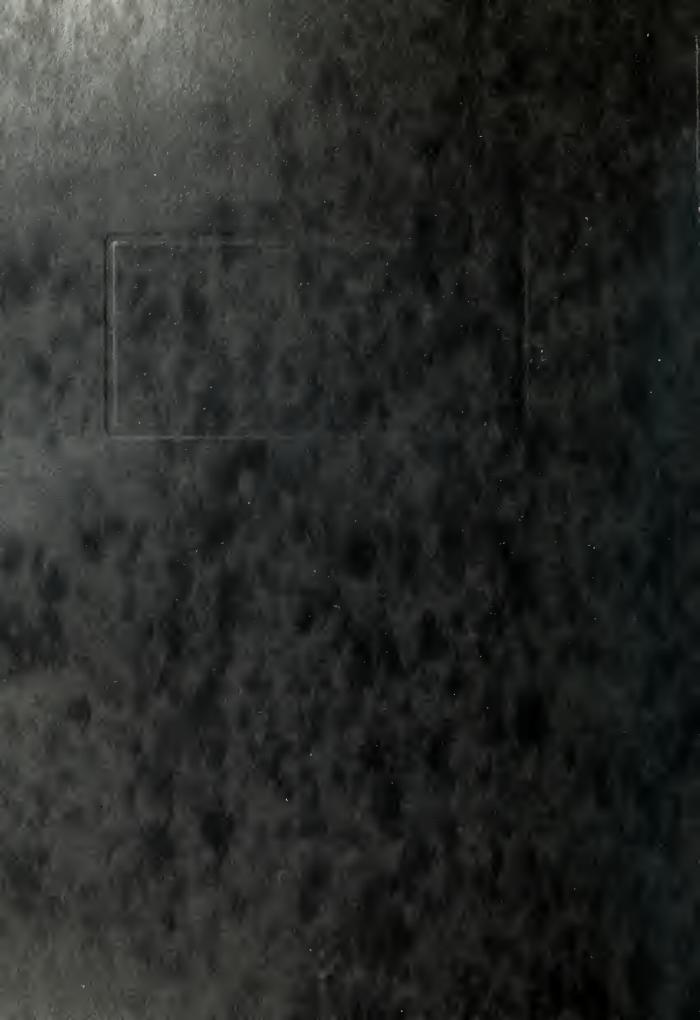
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DATA PROCESSING

22

DEPARTMENT OF EDUCATION
Edmonton, Alberta
June, 1967



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DATA PROCESSING 22

Prerequisite - Tone

Objectives:

- 1. To provide an introduction to unit record and electronic computer data processing.
- 2. To familiarize the students with the terms and routines of data processing and what the worker in an automated office needs to know.
- 3. To acquaint students with data processing procedures and concepts; manual, mechanical and electrical.
- 4. To develop a basic competence in the application of systems and in elementary programming of electro-mechanical and electronic data processing equipment.
- 5. To provide career guidance and background information for students who may wish to enter the field or proceed to advanced study.
- MOTE Students can be introduced to the machines available but it is not intended that Data Processing 22 be a machine operator's course

Scope

I. INTRODUCTION

- Purchasing Routine

Departmental Requisition Stockroom Requisition Purchase Order Incoming Purchase Invoice

- Stock Department Routines

Filing Departmental Requisitions Customers' Mail Orders Perpetual Inventory Physical Inventory Receiving Shipments of Goods

- Sales Order Routines

Sales Invoice Credit Invoice Credit Approval Shipping Department Invoice Customers' Ledger Cards Preparation of Statements

- Payroll Routines

Time Cards
Overtime
Withholding Deductions
Cheques



- Business Reports

Inventory Transaction Listing
Stock Status Summary
Sales Analysis Summary
Financial Reports, (Profit and Loss, etc.)

- Business Routines

Demonstration of repetitive nature of business routines
Trojects involving the use of same information many times
The WHY nof Data Processing

II. DEVELOPMENT OF OFFICE AUTOMATION

- The Data processing cycle
- Automation in simple office tasks
- The keysort process and the pegboard
- The invention of the code
- The growing importance of automation in data processing
- The automated data processing cycle
- Two common automated systems
- Common language machines
- What the worker in an automated office needs to know

III. THE TABULATING SYSTEM

- Recording numeric information on cards
 The tabulating system of processing data
 The standard punched card
 Recording numeric information on the card
 Numeric codes
 First steps in card planning
 Introduction to the key-punch machine
- Recording alphabetic information on cards

 Zone punching area

 Recording the letters of the alphabet

 Planning cards for recording alphabetic information

 Correcting errors made in card punching

 Preparation of card layouts

 Preparation of drum card for key-punch and verifier

 Exercises on key-punch and verifier for all studer: v
- Processing data by the tabulating system
 Steps in the tabulating system
 The sorter and the sorting process
 The collator
 The interpreter
 The reproducer
 The accounting machine
 The calculating process
 The control panel
 Programming the processing of data by the tabulating system



It is not intended to go into control panel functions in the above section. Functions of the machines should be discussed in general.

IV. LLCTRONIC COMPUTER SYSTEM OF DATA PROCESSING

- Introduction

Recent computer improvements
Digital and analog computers
Stys in the electronic computer system
Batch processing; random processing
Units that comprise the electronic computer system
Magnetic tape code
Binary code
Binary code for digits
Binary code for letters
Parity check
Business forms combined with magnetic tape
Magnetic ink forms as input media
Electronic data processing in banks
Converters

- Processing Data by the Electronic Computer System
 Computer memory
 What the computer can do
 Computer words and addresses
 Instruction format
- -Planning an electronic computer program

Defining the problem
Preparing the program steps to solve the problem
Preparing a block diagram of the steps in the
program
Coding and assembling the program
Testing the program
A sample program using symbolic coding
The computer applied to inventory control
Summary

Text: <u>Understanding Modern Business Data Processing</u>, B. Robichaud, 1966 Edition, Gregg Division, McGraw Hill.

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